

Abstract:

Please amend the abstract as follows.

~~A data D isclosed data recording and reproducing method and apparatus with which~~
provide a stable reproduced signal output ~~can be obtained~~ even when overwriting is carried out repeatedly. When recording data to a rewritable recording medium, in scrambling a first data unit 304, scrambling data 12 is prepared using an initial value 13 generated from random numbers and the numbers. A different initial value may be used for each updating of recorded data. The first data unit 304 is scrambled with this initial value 13 so that the ~~writing~~ data to be written to the recording medium is converted to data different from the data already recorded in the same position on the recording medium. At this time, the initial value from random numbers used to generate the scrambling data is embedded in a reserve area of the recording ~~medium~~ medium, and at the time of reproduction this is used ~~to carry out~~ for descrambling. Desired additional information is also included in the initial value and recorded therewith.